

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

Claim 1 (currently amended): A method of detection of oxidation of carbon-containing fibers or fiber-bundles in composites using the eddy current method, wherein the said composites comprise carbon-containing fibers or fiber bundles and a non-conducting or semi-conducting ceramic matrix, and wherein the said fibers or fiber bundles are electrically conducting short fibers isolated by the said non-conducting or semiconducting ceramic matrix such that there is no skin effect upon electrical induction, comprising applying an alternating magnetic field to the composite, the eddy current generated within the fibers causing a signal which is markedly different for oxidated fibers and non-oxidated fibers.

Claim 2 (currently amended): The method of claim 1, wherein ~~the~~ an eddy current is generated in the fibers of a body made of a composite as claimed in claim 1 in which the said non-conducting or semi-conducting ceramic matrix is present in at least a surface layer of the said composite body.

Claim 3 (currently amended): The method of claim 4 2, wherein the eddy current is generated in the fibers of the said body a composite in which the ceramic matrix in at least the surface layer comprises SiC as main constituent and Si and/or Si alloys as further phases.

Claim 4 (original): The method of claim 1, wherein the eddy current is generated in the fibers of a composite in which the carbon-containing fibers comprise carbon fibers, graphite fibers or fibers comprising one or more of the elements Si, B, C, N, Ti or P and/or fibers coated with carbon.

Claim 5 (original): The method of claim 1, wherein the eddy current is generated in the fibers of a composite, comprising measuring the signal in a configuration where an induction coil (1) and a testing coil (4) are arranged on the same side of a shaped body (2) made of the composite.

Claim 6 (original): The method of claim 1, wherein the eddy current is generated in the fibers of a composite material that can be subjected to high thermal load.